

ABSTRACT

A device for measuring the dynamic matrix sensitivity of an inertia sensor is provided with a motion generating machine or a vibrating table for inducing a translational or rotary motion, an acceleration measuring unit, an angular velocity measuring unit or angular acceleration measuring unit, an output device for fetching an output from the unit, one or more light reflectors, a displacement measuring device for seizing a multidimensional motion by using a laser interferometer radiating light from a plurality of directions to the light reflectors, a data processing unit for processing a data indicating the state of motion and obtained from the displacement measuring unit, and a displaying device to display or a transmitting device to transmit the output of the data processing unit and the output of the acceleration measuring unit, angular velocity measuring unit or angular acceleration measuring unit. Since the accelerometer is exposed to acceleration in every conceivable direction and possibly fails to find a correct value of acceleration as encountered by the conventional one-dimensional calibration, it is actually calibrated by applying acceleration from all possible directions thereto.